
**CARDIAC STIMULATION METHOD AND ASSOCIATED SYSTEM
USING A STIMULATION HISTOGRAM AS AN
INTEGRITY DIAGNOSTIC TOOL TO MONITOR THE
PERFORMANCE OF AUTOMATIC CAPTURE VERIFICATION**

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ABSTRACT OF THE INVENTION

10 An implantable cardiac stimulation device and method provide a
histogram for storing the number of primary and backup stimulation
pulses delivered at each amplitude setting, to monitor the performance of
the automatic capture verification. The stimulation device delivers cardiac
stimulation therapy in which a stimulation histogram advantageously
stores the number of primary pulses delivered at each stimulation output,
15 or range of outputs, and separately stores the number of high-energy
backup stimulation pulses delivered. Knowing the historical frequency of
the applied stimulation amplitudes is useful to a physician in selecting
future stimulation pulse output settings and the working margin. This
information is also useful in determining the expected remaining battery
20 life. The stimulation histogram further provides a useful diagnostic tool for
evaluating the integrity of the stimulation device, lead system and
performance of the automatic capture algorithm.